

AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the present application:

Claims 1-15 (Canceled)

16. (Currently Amended) A transmission method for transmitting an orthogonal frequency division multiplexing signal, the method comprising:

composing, ~~on a per unit time basis~~, a plurality of carrier groups each including ~~of~~ one or more subcarriers;

assigning, ~~on a per unit time basis~~, transmission data for a plurality of transmission destination terminals, to the plurality of carrier groups;

selecting, for each of the carrier groups ~~on a per unit time basis~~, one of a first frame configuration where the transmission data is transmitted using one modulated signal, and a second frame configuration where the transmission data is transmitted using a plurality of modulated signals; and

transmitting the assigned transmission data.

17. (Canceled)

18. (Previously Presented) The transmission method according to claim 16, wherein the transmission data is assigned based on channel state information from the transmission destination terminals.

19. (Previously Presented) The transmission method according to claim 16, the transmitting comprising:

transmitting, at a first unit of time, a modulated signal for a first terminal on a first carrier group and a modulated signal for a second terminal on a second carrier group; and

transmitting, at a second unit of time, a modulated signal for a third terminal on the first carrier group and a modulated signal for a fourth terminal on the second carrier group.

20. (Previously Presented) The transmission method according to claim 19, wherein the third and fourth terminals are selected from the first and second terminals.

21. (Currently Amended) A transmission method for transmitting an orthogonal frequency division multiplexing signal, the method comprising:

configuring a transmission frame including a first carrier group where a modulated signal for a first terminal is arranged and a second carrier group where a modulated signal for a second terminal is arranged;

selecting, for the first carrier group, one of a first frame configuration where one modulated signal is transmitted from at least one antenna, and second frame configuration where a plurality of modulated signals are transmitted from a plurality of antennas; and

selecting, for the second carrier group, one of the first frame configuration where one modulated signal is transmitted from at least one antenna, and the second frame configuration, where a plurality of modulated signals are transmitted from the plurality of antennas, each of the plurality of modulated signals being transmitted from a different antenna.

22. (Canceled)

23. (Previously Presented) The transmission method according to claim 21, wherein the selecting of the frame configuration for the first and second carrier groups is based on channel state information from the transmission destination terminals.

24. (Currently Amended) A transmitting apparatus comprising:

an orthogonal frequency division multiplexing signal generation section that generates an orthogonal frequency division multiplexing signal; and

a frame configuration determination section that determines a modulated signal to be assigned to ~~a carrier~~ subcarriers of the orthogonal frequency division multiplexing signal,

wherein the frame configuration determination section composes, ~~on a per unit time~~ basis, a plurality of carrier groups each including one or more subcarriers, ~~and~~, assigns, ~~on a per unit time~~ basis, transmission data for a plurality of transmission destination terminals, to the plurality of composed carrier groups, and selects for each of the carrier groups ~~on a per unit time~~ basis, one of a first frame configuration where one modulated signal is transmitted, and a second frame configuration where a plurality of modulated signals are transmitted, ~~from a plurality of antennas~~

25. (Canceled)

26. (Previously Presented) The transmitting apparatus according to claim 24, wherein the frame configuration determination section composes a frame based on channel state information from the destination terminals.

27. (Previously Presented) The transmitting apparatus according to claim 24 wherein, at a first unit of time, the frame configuration determination section assigns a modulated signal for a first terminal to a first carrier group and assigns a modulated signal for a second terminal to a second carrier group, and at a second unit of time, assigns a modulated signal for a third terminal to the first carrier group and assigns a modulated signal for a fourth terminal to the second carrier group.

28. (Previously Presented) The transmitting apparatus according to claim 27, wherein the third and fourth terminals are selected from the first and second terminals.

29 (Currently Amended) A transmitting apparatus comprising:
an orthogonal frequency division multiplexing signal generation section that generates an orthogonal frequency division multiplexing signal;
a frame configuration determination section that ~~determines a modulated signal to be assigned to a carrier of the orthogonal frequency division multiplexing signal and composes a transmission frame~~ configures a transmission frame including a first carrier group where a modulated signal for a first terminal is arranged and a second carrier group where a modulated signal for a second terminal or arranged; and
a plurality of antennas,

wherein the frame configuration determination section selects, for the first carrier group, one of a first frame configuration for transmitting a modulated signal for a first terminal on a first carrier group included in the orthogonal frequency division multiplexing signal where one modulated signal is transmitted from at least one antenna and a second frame configuration for transmitting a plurality of different modulated signals for the first terminal on the first carrier group where a plurality of modulated signals are transmitted from the plurality of different antennas, and,

selects, for the second carrier group, one of [[a]] the first frame configuration for transmitting a modulated signal for a second terminal on a second carrier group included in the orthogonal frequency division multiplexing signal where one modulated signal is transmitted from at least one antenna and [[a]] the second frame configuration for transmitting a plurality of different modulated signals for the second terminal on the second carrier group where a plurality of modulated signals are transmitted, from the plurality of different antennas.

30. (Previously Presented) The transmitting apparatus according to claim 29, wherein the frame configuration determination section changes, on a time axis, modulated signals arranged on the first and second carrier groups, from modulated signals for the first and second terminals to modulated signals for terminals selected from the first and second terminals.

31. (Previously Presented) The transmitting apparatus according to claim 29, wherein the frame configuration is selected based on channel state information from the terminals.

32. (New) The transmission method according to claim 16, wherein the transmitting transmits the one modulated signal from at least one antenna and transmits the plurality of modulated signals from a plurality of antennas.

33. (New) The transmitting apparatus according to claim 24, wherein the one modulated signal is transmitted from at least one antenna and the plurality of modulated signals are transmitted from a plurality of antennas.